

## Page 1 of 1

All amounts are calculated in domestic currency.

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VC-MAR001	Marmon/Keystone Canada Ltd.								
PO12499	1		M303R0.500	f	9/9/2010	9/7/2010	24.0000	\$1.72	0.0000	0	\$41.28
CAD	No		303 Round Bar 0.500" 115593	f	24.0000	DESJ02		\$41.28	0.0000	0	
	2		M304TR0.500W.035	f	9/9/2010	9/7/2010	80.0000	\$0.98	0.0000	0	\$78.40
	No		304 RD Tube .500 x .035W 115593	f	80.0000	DESJ02		\$78.40	0.0000	0	
	3		M304TR1.000W.065	f	9/9/2010	9/7/2010	20.0000	\$4.05	0.0000	0	\$81.00
	No		304 RD Tube 1.00 x .065W 115593	f	20.0000	DESJ02		\$81.00	0.0000	0	
	4		M304TS0.750W.065	f	9/9/2010	9/7/2010	580.0000	\$2.35	0.0000	0	\$1,363.00
	No		304 SQ Tube .75x.75x.065W 115593	f	600.0000	DESJ02		\$1,363.00	0.0000	0	

<b>Total Received Quantity:</b>	704.0000
<b>Total Qty to Inspect (PO U/M):</b>	0.0000
<b>Total Reject Quantity:</b>	0.0000
<b>Total Receipt Value:</b>	\$1,563.68
<b>Total Balance Due Quantity:</b>	20.0000

# Receiving Report

Date: 10/9/17

Batch No: 0115583

Supplier: MARNON

Dart P/O: 12498

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☒ No ☐ N/A ☐  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QC6 Inspection ☒ N/A ☐  
 Work Order 101070 N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12   

Production/Admin:     
 Date: 10/9/17  
 Received/Costing     
 Initial:   

Location



**Marmon/Keystone Canada Inc.**  
ACIERS SPÉCIALISÉS

290 Chemin du Tremblay  
Boucherville QU CAN J4B 5X9  
TEL. 514/527-9153  
FAX. 450/641-4357

**PACKING SLIP**

PAGE... 1  
Order : 1092198  
Date.. 09/03/2010

**SOLD TO:**

DART AEROSPACE LTD  
1270 ABERDEEN STREET

HAWKESBURY ON CAN K6A 1K7

**SHIPPED TO:**

DART AEROSPACE LTD  
1270 ABERDEEN STREET

HAWKESBURY ON CAN K6A 1K7

SHIP VIA		F.O.B.	SALESPERSON	YOUR ORDER NO.	
TST OVERLAND #222212		BOUCHERVILLE	G. Dulude	12499	
Ordered	Description	Number Pieces	Quantity Shipped	Back Ordered	
	Fax all papers to Linda Lacelle 613-632-1053 Mill tests required with all shipment rev:08/08				
01	24 /FT STAINLESS ROUND BAR SBR .500 CD 303 Cust. part#.: M303R0.500 HT#.....422802 Total...	2 2	✓ 24/FT 2 24/FT 2	IN IN	
02	80 /FT STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 1/2 X .035 A213 STS .500 .035 304L Tariff Number: 7304. Cust. part#.: M304TR0.500W.035 HT#.....YT0674 Total...	✓ 4 4	80/FT 80/FT		
03	20 /FT STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 316L 1 X .065 A213 STS 1.000 .065 316L Tariff Number: 7304. Cust. part#.: M304TR1.000W.065 HT#.....TGB090222 Total...	✓ 1 1	20/FT 20/FT		
04	600 /FT STAINLESS STEEL TUBE A554 304 ORN. TUBE 3/4" X 3/4" X .065 A554 STO .750 .750 .065 304APC Tariff Number: 7306.40.90.10 Cust. part#.: M304TS0.750W.065 HT#.....856028 HT#.....947757 Total...	11 18 29	220/FT 360/FT 580/FT		

No. of Bdls Crate

0 / 1

Total Weight.....:

395

Customers.: \_\_\_\_\_



A Marmon Distribution Services/Berkshire Hathaway Company

# Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO  
ABNAHMEPRUEFZEUGNIS  
INSPECTION CERTIFICATE  
CERTIFICAT DE RECEPTION  
EN 10204 (2005), 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Bestell-/Purchase/Client  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
L5T 5Z1-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
Hersteller/Hersteller/producer

Avviso di Spedizione: D-VI09010751  
Lieferanweisung/Packing list/B.L.

Ordine nr: 904002237 Stock - Canada  
Bestell-/Teile order/Commande

Certificato nr: MEST746116/2009/  
Prüfung/Test/Essai

Conferma ordine nr: EI09002088  
Werk-/Our Order/Ref. nr.

Marchio di Fabbrica:  
Zeichen des Lieferanten  
Trade mark  
Sigle de l'usine/producer



Punzone del Collaudatore:  
Stempel des Werkstoffverständigen  
Inspector's stamp/Poinçon de l'essayeur



Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item inspected/Objet d'essai

Tipo di Elaborazione: E+AOD  
Erschmelzungsart/Manufacturing process/Mode d'élaboration

Specifiche:  
Anforderungen / Requirements / Exigences

VSI 0 303 HS A,CF  
ASME SA320 2007 B8F  
ASTM A370 2009  
QQ-S-764 B/2 303 A  
(0) SEC. II PT. A 2007 EDITION ADD. 2008a  
(1) Chemical analysis only.

AMS 5640 U S30300 A  
ASTM A314 2008 S30300  
ASTM A582 2005 S30300 A

AMS 5640 U TYPE 1 A  
ASTM A320 2008 B8F (1)  
MIL-S-862 B/1 303

Chemical analysis only.

Qualità: T-303  
Werkstoff/Grade/Qualité

Marcia: MV188ZHS MAXIVAL  
Markenbezeichnung/Brand/ Marque

Punzonatura: 303  
Kennzeichnung/Marking/ Marquage

Pos. nr. Pos. nr. Nr. de pos.	Oggetto Objet Prodotto da Valbruna Produit par Valbruna	Dimensioni - in Dimensions Dimension	Tolleranza Tolerance Tolérance	Lunghezza - in Length Longueur	Colata Schmelze Heat Coulée	Pezzi Sociétés Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lot Lot n.
0010	Round	0,5000	484-06B	145 / 145	422802		2.571	818603790

Sono state soddisfatte tutte le condizioni richieste  
Die geforderten Anforderungen sind erfüllt  
The material has been furnished in accordance with the requirements  
Le matériel a été livré conforme aux exigences

Controllo antimescolanza: OK  
Vermischungsprüfung: spezifiziert analytisch durchgeführt  
Antimixing testing performed OK  
Contrôle antimeslange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze  
Besichtigung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional check: satisfactory  
Contrôle visuel et dimensionnel: satisfaisant

TEST	Prove/Prüfung Essai/Prüfung Last, Yield, Tensile, Elong. Last, Yield, Tensile, Elong.	° F	Prove/Prüfung Essai/Prüfung Rp 0,2% Rp 0,2%	Snervamento Bruchgrenze Yield Stress Limite élastique	Snervamento Bruchgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Résistance à traction	Allungamento Bruchdehnung Elongation Allongement	Strizione Bruchdehnung Reduction of area Striction	Resistenza Korrosionsbeständigkeit Corrosion Resistance	Durezza Härte Hardness HB
Valori richiesti / Anforderungen/Required values Valeurs demandées		min max								140 255
A	12,5	68	L	85		110	37	52		253

Mechanical properties according to ASTM A370.

Grain size for ASTM E112 : 5

1) L - longitudinal testing, T - transverse testing, O - Tangential testing/gerichtet

## Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min 0,030 max 0,050	0,20 1,00	1,50 2,00	17,00 19,00	0,60	1,00	8,00 10,00		0,100	0,32 0,40	0,4000				
C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %					
422802	0,042	0,44	1,81	17,42	0,41	0,63	8,20	0,09	0,027	0,34	0,0044				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0.5 h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.  
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, 3, 4, 5 by TÜV and LLOYD'S

MARMON / KEYSTONE

C.C. REVIEWED

DATE INITIAL

08/09 JH

Vicenza, 07/05/09 V00000 (Mod. MCER)	Il collaudatore di stabilimento / der Werkstoffverständiger / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 1
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# Acciaierie Valbruna S.p.A.



CERTIFICATO DI COLLAUDO  
ABNAHMEPRUEFZEUGNIS  
INSPECTION CERTIFICATE  
CERTIFICAT DE RECEPTION  
EN 10204 (2005) , 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Buyer/Purchaser/Client  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
L5T 5Z1-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
Hersteller/Usine productrice

Avviso di Spedizione: D-VI09010751  
Lieferanzeige/Packing list/B.L.

Ordine nr: 904002237 Stock - Canada  
Bestell/Your order/Commande

Certificato nr: MEST746116/2009/  
Prüfung/Test/Essai

Conferma ordine nr: EI09002088  
Works/Our Order/Ref. nr.

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Sigle de usine productrice



Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Finissage

Tipo di Elaborazione: E+AOD  
Erschmelzungsart/Melting process/Mode d'elaboration

Punzone del Collaudatore:  
Stempel des Werksachverständigen  
Inspector's stamp/Pointon de l'essayeur



Specifiche:  
Anforderungen / Requirements / Exigences

VSI 0 303 HS A,CF  
ASME SA320 2007 B8F 0  
ASTM A370 2009  
QQ-S-764 B/2 303 A  
(D) SEC.II PT.A 2007 EDITION ADD. 2008a  
(1) Chemical analysis only.

AMS 5640 U S30300 A  
ASTM A314 2008 S30300  
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A  
ASTM A320 2008 B8F (1)  
MIL-S-862 B/1 303

0Chemical analysis only.

Qualità: T-303  
Werkstoff/Grade/Nuance

Marca: MV188ZHS MAXIVAL  
Markenbezeichnung/Brand/Nuance

Punzonatura: 303  
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Nr. de poste	Oggetto Generaland Product description Descript. du produit	Dimensioni - in Abmessungen Dimension Dimension	Tolleranza Tolerance Tolérance	Lunghezza - in Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losn. Lot nr. Lot nr.
0010	Round	0,5000	484-06B	145 / 145	422802		2.571	818603790

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind lt. Analyse erfüllt.  
The material has been furnished in accordance with the requirements  
Le matériel a été livré conforme aux exigences

Controllo antimescolanza: OK  
Verschmelzungsprüfung: spektralanalytisch durchgeführt  
Antimixing testing performed: OK  
Contrôle antimélange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:  
Beichtigung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional checks: satisfactory  
Contrôle visuel et dimensionnel: satisfaisant

TEST	Provetta/Probetest Spezimen/Specimen Larg. diam. Spets. Brutto diam. Größe Weld diam. Thickness Larg. diam. spets mm	° F	Posti. Saggio Position Lage	Snervamento Streckgrenze Yield Stress Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Erweichung Reduction of area Striction RA %	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Härte Hardness Dureté HB
Valori richiesti / Anforderungen/Required values Valeurs demandées		min max		-	-	-	-	-	-	140 255
A	12,5	68	L	85		110	37		52	253

1) L=longitudinale/längs, T=transversale/quers, O=Transversale/longitudinal

Mechanical properties according to ASTM A370.

Grain size for ASTM E112 : 5

## Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min 0,030 max 0,050	0,20 1,00	1,50 2,00	17,00 19,00	0,60 1,00	1,00 10,00	8,00 10,00	0,100	0,32 0,40	0,4000					
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %				
422802	0,042	0,44	1,81	17,42	0,41	0,63	8,20	0,09	0,027	0,34	0,0044				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

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Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1,3,4,3 by TÜEV and LLOYD'S

MARMON / KEYSTONE

Q.C. REVIEWED

DATE INITIAL

08/09 JH

Vicenza, 07/05/09 VCO008 (Mod. MCER)	Il collaudatore di stabilimento / der Werksachverständiger/ Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 1
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# SHANGHAI CRYSTAL PALACE PIPE CO., LTD

ZHONG GANG, NAN HUI, SHANGHAI CHINA ZIP CODE:201302

## MILL TEST CERTIFICATE

ISO9001:2000 ; PED Material CERTIFICATE (No.:QAC0021058/A)

DATE OF ISSUE: 2010/6/24

CUSTOMER: MARMON/KEYSTONE CANADA INC						CERTIFICATE NO. :2010-3-5-B-5						
P.O.NO.:BN6680						ORDER NO. :2010-03-005-B						
COMMODITY: STAINLESS STEEL SEAMLESS TUBING.						GRADE : ASTM A213-07/ASME SA213-07 TP304/TP304L						
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 320 GRIT.						HEAT NO. : T0674						
CHEMICAL CONTENTS (WT%)												
ELEMENTS		C	Mn	P	S	Si	Ni	Cr				
SPECIFICATION		≤ 0.035	≤ 2.00	≤ 0.040	≤ 0.030	≤ 0.75	8.0~12.0	18.0~20.0				
RESULTS ( LADLE )		0.022	0.82	0.039	0.004	0.46	8.06	18.12				
PHYSICAL PROPERTIES												
Dimensions			Bundle No.	Pieces	Weight (kg)	0.2%YS (Mpa) ≥ 205	T S (Mpa) ≥ 515	EL (%) ≥ 35	FLARING TEST	FLATTENING TEST	HARDNESS HRB ≤ 80	EDDY CURRENT TEST TO E426 (100%)
O.D (inch)	W.T (inch)	Length (feet)										
0.500	0.035	20	P10-5-66	500	797	340	685	45.5	OK	OK	76	OK (DRILLED HOLE)
REMARKS:						1.WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT						
AS PER ASTM A213/ASME SA213-07						2.THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.						
WALL THICKNESS TOLERANCE AS PER ASTM A269-07						SHANGHAI CRYSTAL PALACE PIPE CO.,LTD  MANAGER OF QUALITY ASSURANCE DEPARTMENT						
IN COMPLIANCE TO NACE MR0175-2003												
IC TEST TO ASTM A262 PRACTICE E												
SOLUTION HEAT TREATMENT :1050°C X 1.5m/min												
NO WELD REPAIR WAS PERFORMED						QC REVIEWED AUG 11 2010 <i>ML</i>						
FREE FROM MERCURY CONTAMINATION												
COUNTRY OF ORIGIN: CHINA												
MILL TEST CERTIFICATE TO EN 10204/3.1												
INVOICE NO: YK-10-06-62												



# SHANGHAI CRYSTAL PALACE PIPE CO., LTD

ZHONG GANG, NAN HUI, SHANGHAI CHINA ZIP CODE: 201302

## MILL TEST CERTIFICATE

ISO9001:2000 ; PED Material CERTIFICATE (No.: QAC0021058/A)

DATE OF ISSUE: 2010/4/26

CUSTOMER: MARMON/KEYSTONE CANADA INC						CERTIFICATE NO.: 2010-2-5-A-14						
P.O. NO.: MN6609						ORDER NO.: 2010-02-005-A						
COMMODITY: STAINLESS STEEL SEAMLESS TUBING						GRADE: ASTM A213-07 / ASME SA213-07 TP316/TP316L						
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 320 GRIT.						HEAT NO.: TGB090222						
CHEMICAL CONTENTS (WT%)												
ELEMENTS		C	Mn	P	S	Si	Ni	Cr	Mo			
SPECIFICATION		≤ 0.035	≤ 2.00	≤ 0.040	≤ 0.030	≤ 0.75	10.0~14.0	16.0~18.0	2.00~3.00			
RESULTS (LADLE)		0.020	0.83	0.038	0.001	0.34	11.08	16.76	2.07			
PHYSICAL PROPERTIES												
Dimensions			Bundle No.	Pieces	Weight (kg)	0.2%YS (Mpa) ≥ 205	TS (Mpa) ≥ 515	EL (%) ≥ 35	FLARING TEST	FLATTENING TEST	HARDNESS HRB ≤ 80	EDDY CURRENT TEST (100%)
O.D (inch)	W.T (inch)	Length (feet)										
1.000	0.065	20	10-2-13	25	150	335	665	51.0	OK	OK	75	OK
REMARKS:						1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT						
AS PER ASTM A213/ASME SA213-07						2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.						
WALL THICKNESS TOLERANCE AS PER ASTM A269-07						SHANGHAI CRYSTAL PALACE PIPE CO., LTD  MANAGER OF QUALITY ASSURANCE DEPARTMENT						
IN COMPLIANCE TO NACE MR0175-2003												
IC TEST TO ASTM A262 PRACTICE E												
SOLUTION HEAT TREATMENT : 1050°C X 1.5m/min												
NO WELD REPAIR WAS PERFORMED						Q.C. Reviewed						
FREE FROM MERCURY CONTAMINATION						2010/6/16/10						
COUNTRY OF ORIGIN: CHINA												
MILL TEST CERTIFICATE TO EN 10204/3.1												
INVOICE NO: YK-10-04-55												

SIS - 1.000 - .065 - 316L \* TGB090222 \* 100066 \* MN6609 \* 6/16/2010



### CERTIFICATE OF COMPLIANCE

We hereby certify that the material listed below has been used to produce stainless steel tubing in accordance with specifications outlined in ASTM A554-03/EN 10204 3.1.

Type: 304/304L 6/9/10  
Size: 0.750"x 0.750"x 0.065"x 240.000"  
Finish: As Welded  
Your P.O. #: MX2046  
Item Code: 50-9781

HEAT NO.:

856028

COIL NO.: 203346

#### CHEMICAL ANALYSIS (%):

C	Mn	P	S	Si	Cr	Mo	Ni
0.0300	1.2300	0.0270	0.0030	0.3400	18.1000	N/R	8.0300
Cu	Ti	Al	N	Co	Cb		
N/R	N/R	N/R	0.0590	N/R	N/R		

#### MECHANICAL PROPERTIES:

YIELD STRENGTH P.S.I.	TENSILE STRENGTH P.S.I.	ELONGATION %	HARDNESS
43510	97752	55.00	86.9 HRB

*Mercury has not been used as an alloying material nor is it present in our processing methods.*

Date: 06/21/2010

Rob Kaminski

Metallurgical Lab Technician

Q.C. Reviewed

As 06/29/10





### CERTIFICATE OF COMPLIANCE

We hereby certify that the material listed below has been used to produce stainless steel tubing in accordance with specifications outlined in ASTM A554-03/EN 10204 3.1.

Type: 304/304L  
Size: 0.750"x 0.750"x 0.065"x 240.000"  
Finish: As Welded  
Your P.O. #: MX2035  
Item Code: 50-9781

*Sublot*

HEAT NO.: 947757

COIL NO.: 8769204

#### CHEMICAL ANALYSIS (%):

C	Mn	P	S	Si	Cr	Mo	Ni
0.0220	1.7200	0.0320	0.0000	0.4300	18.2000	N/R	8.1000
Cu	Ti	Al	N	Co	Cb		
N/R	N/R	N/R	0.0700	N/R	N/R		

#### MECHANICAL PROPERTIES:

YIELD STRENGTH	TENSILE STRENGTH	ELONGATION	HARDNESS
P.S.I.	P.S.I.	%	
43300	88500	59.00	81 HRB

*Mercury has not been used as an alloying material nor is it present in our processing methods.*

Date: 04/30/2010

*Rob Kaminski*

Rob Kaminski

Metallurgical Lab Technician

Q.C. Reviewed  
*0805/06/10*

190 Frobisher Drive, Waterloo, Ontario, N2V 2A2  
Phone: (519) 746-0088 Fax: (519) 746-3941 (Toll Free: 1-800-563-8823)



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO12499

Purchase Order Date 9/03/10

PO Print Date 9/03/10

Page Number 1 of 2

Order From :

VC-MAR001

MARMON/KEYSTONE CANADA LTD.  
290 CHEMIN DU TREMBLAY  
BOUCHERVILLE, QC J4B 5X9  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

800 361 8142

450 641 4357

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAXED**  
CZ 10/9/10

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M303R0.500	303 Round Bar 0.500"	9/09/10 Yes	✓ 24.00 f	TST ground	\$1.7200	\$41.28
		ok Special Inst: MATERIAL: AISI 303 SS ROUND BAR NOTE: AISI 304/316 NOT ACCETABLE AS PER ASTM A582					
2	M304TR0.500W.035	304 RD Tube .500 x .035W	9/09/10 Yes	✓ 80.00 f	TST ground	\$0.9800	\$78.40
		ok Special Inst: MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269					
3	M304TR1.000W.065	304 RD Tube 1.00 x .065W	9/09/10 Yes	✓ 20.00 f	TST ground	\$4.0500	\$81.00
		ok Special Inst: AS ABOVE					

*Chantal Lavoie*

*U*

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 1

Change Date: 9/03/10



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO12499**

Purchase Order Date 9/03/10

PO Print Date 9/03/10

Page Number 2 of 2

Order From :

VC-MAR001

MARMON/KEYSTONE CANADA LTD.  
290 CHEMIN DU TREMBLAY  
BOUCHERVILLE, QC J4B 5X9  
CA

Contact Name

Vendor Phone

800 361 8142

Vendor Fax

450 641 4357

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

4	M304TS0.750W.065	304 SQ Tube .75x.75x.065W	9/09/10	600.00	TST ground	\$2.3500	\$1,410.00
			Yes		f <i>SL</i>		

Special Inst: MATERIAL: AISI 304/316 SEAMLESS  
STEEL SQUARE TUBING  
AS PER ASTM A554 MILL FINISH OR  
ASTM A269 MILL FINISH

PO Total:

**\$1,610.68**

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 9/03/10

*CL*  
No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable



# Marmon/Keystone Canada Inc.

ACIERS SPÉCIALISÉS

290 Chemin du Tremblay Boucherville QU CAN J4B 5X9

Tel -514-527-9153 232 Wats 1-800-361-8142 FAX -450-641-4357

E-mail: gdulude@mkcdn.com

PAGE.: 1

Date.: 9/02/10

Quotation number.: 1-579938

## SOUSSION/QUOTATION

ATTN.: CHANTAL LAVOIE

Sold To:

DART AEROSPACE LTD  
1270 ABERDEEN STREET

Ship To:

DART AEROSPACE LTD  
1270 ABERDEEN STREET

Territory: 16A

Telephone: 613 632 9577

Fax.....: 613 632 1053

HAWKESBURY

ON CAN K6A 1K7

HAWKESBURY

ON CAN K6A 1K7

Ship Via

TST OVERLAND #22212

F.O.B

BOUCHERVILLE

Salesperson

G. Dulude

Your Reference No.

### Termes

Les prix et livraisons sont basés sur la totalité de cette soumission. Les changements concernant la quantité ou la livraison peuvent exiger une révision de soumission. Nous nous réservons le droit d'ajuster nos prix de vente en conformité avec les coûts de l'usine, les frais de transport, les tarifs douaniers, les taxes fédérale et provinciale applicables à la date de livraison. Une variation dans les quantités livrées concordera à la pratique courante du vendeur. Toutes les commandes sont conditionnelles à l'approbation du département de crédit. Le client doit fournir une commande écrite non-annulable pour l'acceptation de cette soumission.

Pricing and delivery are based on the complete bill of Material. Change to quantities or delivery may require a revised quotation. Pricing and delivery, as quoted, are based on conditions prevailing at the time of quotation and are subject to review at time of order. Permissible variation in shipping quantities will be to the seller's standard practice. Orders resulting from quotation are subject to our credit approval. The Customer is to supply a written non-cancellable order to accept this quotation.

Nous vous remercions de votre demande de prix et il nous fait plaisir de vous soumettre les renseignements. / We thank you for your inquiry and take pleasure in quoting on your requirements as follows:

Quantité/ Quantity	Description	Jours Livraison Days	Prix Pricing
Line - 1 24 FT	STAINLESS ROUND BAR A582 SBR .500 CD 303 stock en lgrs de 12'	1	1.720/FT 41.28
Line - 2 80 FT	STAINLESS STEEL SEAMLESS TUBE A213/SA213 A.W. POLI STS .500 .035 304L stock	1	.980/FT 78.40
Line - 3 20 FT	STAINLESS STEEL SEAMLESS TUBE A213/SA213 A.W. POLI STS 1.000 .065 316L stock en lgrs de 20' et en 316L seulement	1	4.050/FT 81.00
Line - 4 600 FT	STAINLESS STEEL TUBE A554 FINI MOULIN 304 STO .750 .750 .065 304APC surcharge of \$442.10 included in the selling price	1	2.350/FT 1,410.00
	Energy Surcharge		12.20
Taxes applicables: En sus/ All applicable taxes Extra: Tarifs douaniers/ Duty		Montant total/ Total Amount...:	1,622.88
Les prix soumis sont en fonds canadiens sauf si precise autrement/ All prices quoted in Canadian Dollars unless otherwise stated.		Poids total/ Total weight....:	406.5 lbs



Services de distribution Marmon/La société Berkshire Hathaway

M1010B0.500X03.000	0.6	0	0	0
M1010B1.000X02.000	1.58E-03	0	12.4	6
M1010R0.375	0.36	0	10	0
M1018TR1.250W.109	3.684210526	0	14.21	0
M12883/45-01	2	0	1	4
M174B0.250X4.000	1.860389474	0	6.1	6 12 8+
M174B0.500X02.000	5.955989474	0	65.2	20
M174B1.250X02.000	32.42264894	0	14.0116	20 110.12402
M174B1.500X02.250	1.423954737	0	16.47326	20
M174B2.000X01.500	2.412105263	0	12.6	12
M174PH-H900B3.937X4.750	15.00431263	0	22.8	8
M174PH-H900R1.000	84.6285268	0	21.8	4
M174PH-H900R1.375	75.65768421	0	34.4	4
M2024T3S.040	349.1303579	0	345.34	64
M2650-6	29.84286747	0	67	30
M303B1.000X2.000	1.83159	0	17.68421	6
* M303B1.500X03.000	0.121647368	0	2.5427	6
M303B2.000X1.750	2.833154211	0	14.50897	10
M303R0.313	0.077236842	0	24.11	12
M303R0.500	11.00081743	0	24	20 20 8+
M303R0.750	69.77421053	0	82.1849	60
M304B0.500X2.500	420.0967105	0	71.75	12
M304EX0.75-16F	316.4872447	0	811.592333	192
M304R.250	0.901510105	0	37.189468	12
M304R1.00	8.210526316	0	0	0
M304R0.750	10.51168421	0	29.09473684	24
M304S12GA	68.50030015	0	198.6	32
M304S26GA	24.6202717	0	144	32
M304TR0.375W.035	3.16E-02	0	63.5	6
M304TR0.375W.065	0.137404047	0	27.5387	12
M304TR0.500W.035	78.49477838	0	123.732747	80 80 8+
M304TR0.500W.049	36.66117676	0	248.8119478	60
M304TR0.750W.065	1.212994737	0	63.5	24
M304TR1.000W.049	3.202610316	0	30.841584	24
M304TR1.000W.065	4.039999996	0	9.77247368	12 12
M304TS0.500W.049	73.45374274	0	441.2500258	120
M304TS0.750W.049	290.2529074	0	342.8650048	120
M304TS0.750W.065	167.4498235	0	581.595285	200 600 8+
* M4130NB0.500X03.000	84.30421053	0	47.625	40 24 8+ *
M4130NT0.500W.049	5.722631579	0	67.333	10
M4130NT0.750W.049	37.19178947	0	139.1667	30
M4130NT1.000W.120	0.251894737	0	19	12
M5052H32S.032	7.958226316	0	53.1	30
M6061T6A.750W0.625	1	0	0	0
M6061T6B0.250X06.000	3.367736842	0	36	12
M6061T6B0.375X00.750	3.873942105	0	18.1471	12
M6061T6B0.375X03.000	0.245668421	0	13.6	6
M6061T6B0.500X01.000	0.001531579	0	21.591	10
M6061T6B0.500X05.000	29.14684211	0	49.8636	12
M6061T6B0.500X06.000	21.61113684	0	43.2814	24
M6061T6B0.750X00.250	5.619157895	0	16.5	12
M6061T6B0.750X00.750	12.92292474	0	36.5883	24

TRANSMISSION VERIFICATION REPORT

TIME : 09/03/2010 08:15  
NAME :  
FAX :  
TEL :  
SER.# : F9N212739

DATE, TIME	09/03 08:15
FAX NO./NAME	14506414357
DURATION	00:00:29
PAGE(S)	02
RESULT	OK
MODE	STANDARD
	ECM



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

**PURCHASE ORDER**

Purchase Order ID PO12499

Purchase Order Date 9/03/10

PO Print Date 9/03/10

Page Number 1 of 2

Order From : VC-MAR001  
MARMON/KEYSTONE CANADA LTD.  
290 CHEMIN DU TREMBLAY  
BOUCHERVILLE, QC J4B 5X9  
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	800 361 8142	Requisition Nbr	
Vendor Fax	450 641 4357	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
M303R0.500		303 Round Bar 0.500"	9/09/10 Yes	24.00 f	TST ground	\$1.7200	\$41.28
		Special Inst: MATERIAL: AISI 303 SS ROUND BAR NOTE: AISI 304/316 NOT ACCEPTABLE AS PER ASTM A582					
M304TR0.500W.035		304 RD Tube .500 x .035W	9/09/10 Yes	80.00 f	TST ground	\$0.9800	\$78.40
		Special Inst: MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269					
M304TR1.000W.065		304 RD Tube 1.00 x .065W	9/09/10 Yes	20.00 f	TST ground	\$4.0500	\$81.00
		Special Inst: AS ABOVE					

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 1

Change Date: 9/03/10



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO12499**

Purchase Order Date 9/03/10

PO Print Date 9/03/10

Page Number 2 of 2

Order From :

VC-MAR001

MARMON/KEYSTONE CANADA LTD.  
290 CHEMIN DU TREMBLAY  
BOUCHERVILLE, QC J4B 5X9  
CA

Contact Name

Vendor Phone

800 361 8142

Vendor Fax

450 641 4357

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

M304TS0.750W.065

304 SQ Tube  
.75x.75x.065W

9/09/10

600.00 TST ground

\$2,3500

\$1,410.00

Yes

f

Special Inst: MATERIAL: AISI 304/316 SEAMLESS  
STEEL SQUARE TUBING  
AS PER ASTM A554 MILL FINISH OR  
ASTM A269 MILL FINISH

PO Total:

\$1,610.68

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 1

Change Date: 9/03/10





**Marmon/Keystone Canada Inc.**  
ACIERS SPÉCIALISÉS

PAGE: 1  
290 Chemin du Tremblay Boucherville J4B 5X9  
TEL (514) 527 9153 FAX (450) 641 4357

Shipping date: 09/03/2010  
Name of Carrier: TST OVERLAND #222212  
F.O.B.: BOUCHERVILLE

FORMULE COMBINÉE ET ABREGÉE DE CONNAISSANCE SIMPLE - CONTRAT D'EXPÉDITION DE MESSAGERIES.  
ADOPTÉE PAR LES CHEMINS DE FER CANADIENS (Canadian Freight Classification) et pouvant être utilisée à toute  
agence de gare et bureau PER QUI ASSURENT LE TRANSPORT DES MARCHANDISES ET DES MESSAGERIES ET QUI  
SONT SOUS LA JURIDICTION DE LA COMMISSION CONSIGNEURS A CANADIENNE DES TRANSPORTS. ENRI A LA  
DEMANDE DE L'EXPÉDITEUR.

Il est convenu entre l'agent voiturier chargé du transport d'une partie ou du tout desdites marchandises sur une partie quelconque  
du parcours à destination, et tout intermédiaire dans une partie ou toutes lesdites marchandises que tout service essence ci-has est sujet à  
toutes les conditions (qui sont par les présentes incorporées par renvoi au prospect et ont la même force et le même effet que si elles  
étaient énoncées et spécialement énoncées au long dans ce document.)

1. approuvées par la Commission des Transports du Canada, suivant l'ordonnance générale numéro T-6 du 1er février 1965,  
detransport sur demande, lorsque lesdites marchandises seront transportées par une compagnie de chemins de fer ou  
2. approuvées dans la formule de connaissance ci-dessus, ne imposée par les tarifs applicables, classifications ou règlements  
s'appliquant aux services des chemins de fer, lorsque lesdites marchandises sont transportées par route; ou  
3. approuvées dans la formule de connaissance en vigueur du règlement adopté par l'arrêté en conseil 986-79 du 4 Avril 1979, lorsque  
lesdites marchandises provenant du Québec, sont transportées par route.  
4. approuvées dans la formule du Contrat d'Expédition Messageries approuvée par la Commission des Chemins de Fer du Canada par  
l'ordonnance numéro T-43 du 18 septembre 1967 telle que citée dans la Classification (Express Traffic Association Tariff 1th) en  
vigueur à la date ci-dessus, lorsque les marchandises sont transportées par voiturier express soumis à la juridiction de ladite  
Commission; et étant adoptées par le voiturier et acceptées pour lui-même ainsi que pour ses délégués.

Défini A:

DART AEROSPACE LTD  
1270 ABERDEEN STREET

HAWKESBURY ON CAN K6A 1K7

COMBINATION SHORT FORM OF STRAIGHT BILL OF LADING-EXPRESS SHIPPING CONTRACT ADOPTED BY  
RAIL FREIGHT AND EXPRESS CARRIERS. SUBJECT TO THE JURISDICTION OF THE CANADIAN TRANSPORT  
COMMISSION ISSUED AT SHIPPER'S REQUEST.  
It is mutually agreed, as to each carrier of all or any portion of said route to destination, and as to  
each party at any time interested in all or any of said goods, that every service to be performed hereunder shall be subject to all  
the terms and conditions (which are hereby incorporated by reference and have the same force and effect as if the same were fully  
and specifically set forth herein.)

1. approved by the board of transport commission for Canada by General Order No. T-6, dated February 1, 1965 set forth in the  
Canadian Freight Classification and also available at all railway agency stations and freight offices upon request, when said  
goods are carried by rail carrier; or
2. if the bill of lading set forth is or prescribed by the relevant tariffs, classification, statutes and regulations motor carrier's  
services when said goods are carried by a motor carrier; or
3. if the bill of lading form prescribed by the regulations adopted by the order-in-council 986-79 dated April 4, 1979  
of the Shipping Contract approved by the Board of Transport Commission for Canada by General Order No. T-43 dated  
September 18, 1967 and set forth in Express Traffic Association Tariff 1th in effect on the date hereof, when said goods are  
carried by an express carrier subject to the jurisdiction of the said Board; and which are agreed to by the shipper and accepted  
by himself and his assigns.

Telephone: 613 632 5200

Customer order: 12499

Description du chargement et marques spéciales/Description of shipments and special marks	Poids/Weight	Pièces/PCS	Si les frais sont payables d'avance entrez ou estampez ici: / If charges are to be prepaid write or stamp here:
Fax all papers to Linda Lacelle 613-632-1053 Mill tests required with all shipment  rev:08/08			Reçu/Received \$
01-STAINLESS ROUND BAR SBR .500 CD 303 09/03/2010 24 FT 2 IN. Cust. part#: M303R0.500 Rev: VAL HT#:422802		16.1	Doit être créditée aux frais sur les biens ci-contre.
02-STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 1/2 X .035 A213 STS .500 .035 304L 09/03/2010 80 FT Cust. part#: M304TR0.500W.035 Rev: YK HT#:YT0674		13.9	Agent ou consignataire/Agent or Consigner
03-STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 316L 1 X .065 A213 STS 1.000 .065 316L 09/03/2010 20 FT Cust. part#: M304TR1.000W.065 Rev: YK HT#:TGB090222		13.0	Par/Per.
04-STAINLESS STEEL TUBE A554 304 ORN. TUBE 3/4" X 3/4" X .065 A554 STO .750 .750 .065 304APC 09/03/2010 580 FT Cust. part#: M304TR0.750W.065 Rev: FK HT#:856028 FK HT#:947757		351.5	A l'usage du voiturier/For carrier's use
			Avances et au delà/ Advance and or beyond \$
			Divers / Misc. \$
			Suppl. Pièce / Suppl. Piece \$
			Suppl. Valeur / Suppl. Value \$
			Total/Total \$
			L'expéditeur inscrit le montant (P.S.L.)
			Montant/Amount \$
			Frais/Fee \$
			Total/Total \$
Eds Crte 0 + 1 = 1	Nombre de pièces à grandes dimensions / Number of extra large pieces	Poids total/ Total weight 395 LB	Valuation/Valuation
Si le tarif l'exige indiquer le volume total / Where required by tariff shipper must complete the following. Dimensions/ Dimensions	Volume (pièces cubes) / Total cubic feet	Poids (poids) / Dimensional weight	Numéro du comm/Order number 1092198
Expéditeur/ Shipper	Agent/ Transport	Signature du client/Customer	



Services de distribution Marmon / La société Berkshire Hathaway



SRK- -500- -CD -303 R \* 422802 \* 100298 \* 8900SA \* 6002/12/R

# Acciaierie Valbruna S.p.A.



## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005), 3.1

36100 VICENZA (Italia) - Viale della solenza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Bestandskunden / Clients  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
L5T 5Z1-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
Hersteller/Usine producer

Avviso di Spedizione: D-VI09010751  
Lieferantrag/Packing list/AL

Ordine nr: 904062237 Stock - Canada  
Bestell/Vororder/Commande

Certificato nr: MEST746116/2009/  
Prüfung/Prüfzeugnis

Conforma ordine nr: EI09002088  
Werk/Der Order/Pai nr.

Marchio di Fabbrica:  
Zeichen des Urtümers  
Trade mark  
Signe de l'usine productrice



Punzone del Collaudatore:  
Stempel des Werkssachverständigen  
Inspection's stamp/Prinzipal de l'usine



Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item inspected/Prüfgegenstand

Tipo di Elaborazione: E+AOD  
Erzeugnisart/Machungsprozess/Mode d'elaboration

Specifiche:  
Anforderungen / Requirements / Exigences

VSI 0 303 HS A,CF  
ASME SA320 2007 B6F 0  
ASTM A370 2009  
QQ-S-764 B/2 303 A  
(D) SEC.II PT.A 2007 EDITION ADD. 2008a  
(1) Chemical analysis only.

AMS 5840 U S30300 A  
ASTM A314 2008 S30300  
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A  
ASTM A320 2008 B6F (1)  
MIL-S-882 B/1 303

Chemical analysis only.

Qualità: T-303  
Werkstoff/Grade/Qualität

Marcia: MV186ZHS MAXIVAL  
Markenbezeichnung/Brand/Marken

Funzionatura: 303  
Kannzeichnung/MachungsMarkung

Pos. nr. Item nr. Nr. de pièce	Oggetto Gegegenstand Product description Description du produit	Dimensioni - in Abmessungen Dimension Dimension	Tolleranza Toleranz Allowance Tolérance	Lunghezza - in Länge Length Longueur	Colata Schmelze Pour Coulée	Pezzi Stücken Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lot nr. Lot nr.
0010	Round	0,5000	484-068	145 / 145	422802		2,571	818603790

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind in Anlehnung erfüllt.  
The material has been furnished in accordance with the requirements.  
Le matériaux ont été livrés conformément aux exigences.

Controllo antimescolanza: OK  
Verwechslungsprüfung: spezialanalytisch durchgeführt  
Automating testing performed: OK  
Controlle antimeschlung: N.N.

Controllo visivo e dimensionale: soddisfa le esigenze:  
Beachtung und Abmessung: ohne Beanstandung  
Visual inspection and dimensional check satisfactory.  
Controlle visuel et dimensionnel: satisfaisant.

TEST	Prove/Prüfung Long. Short. Spec. Läng. Kurz. Spez. Long. Short. Spec. Läng. Kurz. Spez.	° F	Post. Bathy Post. Bathy Post. Bathy	Snervamento Zugversuch Tensile strength Rp 0,2% k.s.l.	Snervamento Zugversuch Tensile strength Rp 0,2% k.s.l.	Resistenza Zugversuch Tensile strength Rp 0,2% k.s.l.	Allungamento Zugversuch Elongation E 4d %	Strizione Zugversuch Reduction of area RA %	Resistenza Zugversuch Tensile strength Rp 0,2% k.s.l.	Durezza Härte Hardness HB
	Valori richiesti i Anforderungen Values dimension	min max								140 255
A	12,5	68	L	85		110	37	52		253

Mechanical properties according to ASTM A370.  
Grain size for ASTM E112 : 5

1) L=longitudinale/Long. T=transversale/Transv. O=Temperaturangabe

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelze/Coûlée	min 0,030 max 0,050	0,20 1,00	1,50 2,00	17,00 19,00	0,60 1,00	1,00 10,00	8,00 10,00	0,100 0,40	0,32 0,40	0,4000					
C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %					
422802	0,042	0,44	1,81	17,42	0,41	0,63	8,20	0,09	0,027	0,34	0,0044				

Produced without class I-II Ozone depleting substances.  
Solution heat treated free from continuous carbide network.  
Annealing temperature: 1940°F for 0.5 h/water.  
Micro and macro etch test: OK  
Material is OFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination  
We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.  
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, 3, 4.3 by TÜV and LLOYD'S

MARMON / KEYSTONE

Q.C. REVIEWED  
DATE 08/09 INITIAL JF

Vicenza, 07/05/09 V00000 (Mod. MCFR)	Il collaudatore di stabilimento / der Werkssachverständigen / Works Inspector / L'agent d'usine M. Rizzotto	Pagina 1 di 1
--	--	---------------



CRYSTAL-PALACE

## SHANGHAI CRYSTAL PALACE PIPE CO., LTD

ZHONG GANG, NAN HUI, SHANGHAI CHINA ZIP CODE: 201302

## MILL TEST CERTIFICATE

ISO9001:2000 ; PED Material CERTIFICATE (No.: QAC0021058/A)

DATE OF ISSUE: 2010/6/24

CUSTOMER: MARMON/KEYSTONE CANADA INC						CERTIFICATE NO.: 2010-3-5-B-5						
P.O. NO.: BN6680						ORDER NO.: 2010-03-005-B						
COMMODITY: STAINLESS STEEL SEAMLESS TUBING						GRADE: ASTM A213-07/ASME SA213-07 TP304/TP304L						
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 320 GRIT.						HEAT NO.: YT0674						
CHEMICAL CONTENTS (WT%)												
ELEMENTS		C	Mn	P	S	Si	Ni	Cr				
SPECIFICATION		≤ 0.035	≤ 2.00	≤ 0.040	≤ 0.030	≤ 0.75	8.0-12.0	18.0-20.0				
RESULTS (LADLE)		0.022	0.82	0.039	0.004	0.46	8.06	18.12				
PHYSICAL PROPERTIES												
Dimensions			Bundle No.	Pieces	Weight (kg)	0.2%YS (Mpa) ≥ 205	TS (Mpa) ≥ 515	EL (%) ≥ 35	FLARING TEST	FLATTENING TEST	HARDNESS HRB ≤ 80	EDDY CURRENT TEST TO E426 (100%)
O.D (inch)	W.T (inch)	Length (feet)										
0.500	0.035	20	P10-5-66	500	797	340	685	45.5	OK	OK	76	OK (DRILLED HOLE)
<b>REMARKS:</b> AS PER ASTM A213/ASME SA213-07 WALL THICKNESS TOLERANCE AS PER ASTM A269-07 IN COMPLIANCE TO NACE MR0175-2003 IC TEST TO ASTM A262 PRACTICE E SOLUTION HEAT TREATMENT : 1050°C X 1.5m/min NO WELD REPAIR WAS PERFORMED FREE FROM MERCURY CONTAMINATION COUNTRY OF ORIGIN: CHINA MILL TEST CERTIFICATE TO EN 10204/3.1 INVOICE NO: YK-10-06-62						1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT 2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.						
						SHANGHAI CRYSTAL PALACE PIPE CO., LTD  MANAGER OF QUALITY ASSURANCE DEPARTMENT						

QC REVIEWED

AUG 11 2010

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**SHANGHAI CRYSTAL PALACE PIPE CO., LTD**

**ZHONG GANG, NAN HUI, SHANGHAI CHINA ZIP CODE:201302**

# MILL TEST CERTIFICATE

**ISO9001:2000 ;PED Material CERTIFICATE (No.:QAC0021058/A)**

DATE OF ISSUE: 2010/4/26

CUSTOMER:MARMON/KEYSTONE CANADA INC						CERTIFICATE NO. :2010-2-5-A-14						
P.O.NO.:MN6609						ORDER NO. :2010-02-005-A						
COMMODITY: STAINLESS STEEL SEAMLESS TUBING						GRADE : ASTM A213-07/ASME SA213-07 TP316/TP316L						
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 320 GRIT						HEAT NO. :TGB090222						
CHEMICAL CONTENTS (WT%)												
ELEMENTS		C	Mn	P	S	Si	Ni	Cr	Mo			
SPECIFICATION		≤0.035	≤2.00	≤0.040	≤0.030	≤0.75	10.0~14.0	16.0~18.0	2.00~3.00			
RESULTS ( LADLE )		0.020	0.83	0.038	0.001	0.34	11.08	16.76	2.07			
PHYSICAL PROPERTIES												
Dimensions			Bundle No.	Pieces	Weight (kg)	0.2%YS (Mpa) ≥205	TS (Mpa) ≥515	EL (%) ≥35	FLARING TEST	FLATTENING TEST	HARDNESS HRB ≤80	EDDY CURRENT TEST (100%)
O.D (inch)	W.T ( inch )	Length (feet)										
1.000	0.065	20	10-2-13	25	150	335	665	51.0	OK	OK	75	OK
REMARKS:						1.WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT						
AS PER ASTM A213/ASME SA213-07						2.THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.						
WALL THICKNESS TOLERANCE AS PER ASTM A269-07						SHANGHAI CRYSTAL PALACE PIPE CO.,LTD   MANAGER OF QUALITY ASSURANCE DEPARTMENT						
IN COMPLIANCE TO NACE MR0175-2003												
IC TEST TO ASTM A262 PRACTICE E												
SOLUTION HEAT TREATMENT :1050°C X 1.5m/min												
NO WELD REPAIR WAS PERFORMED												
FREE FROM MERCURY CONTAMINATION						Q.C. Reviewed 28.06/16/10						
COUNTRY OF ORIGIN: CHINA												
MILL TEST CERTIFICATE TO EN 10204/3.1												
INVOICE NO: YK-10-04-55												



## CERTIFICATE OF COMPLIANCE

We hereby certify that the material listed below has been used to produce stainless steel tubing in accordance with specifications outlined in ASTM A554-03/EN 10204 3.1.

Type: 304/304L  
Size: 0.750"x 0.750"x 0.065"x 240.000"  
Finish: As Welded  
Your P.O. #: MX2046  
Item Code: 50-9781

HEAT NO.: 856028

COIL NO.: 203346

### CHEMICAL ANALYSIS (%):

C	Mn	P	S	Si	Cr	Mo	Ni
0.0300	1.2300	0.0270	0.0030	0.3400	18.1000	N/R	8.0300
Cu	Ti	Al	N	Co	Cb		
N/R	N/R	N/R	0.0590	N/R	N/R		

### MECHANICAL PROPERTIES:

YIELD STRENGTH P.S.I.	TENSILE STRENGTH P.S.I.	ELONGATION %	HARDNESS
43510	97752	55.00	86.9 HRB

*Mercury has not been used as an alloying material nor is it present in our processing methods.*

Date: 06/21/2010

Rob Kaminski

Metallurgical Lab Technician

Q.C. Reviewed  
13 06/29/10

190 Frobisher Drive, Waterloo, Ontario, N2V 2A2  
Phone: (519) 746-0088 Fax: (519) 746-3941 (Toll Free: 1-800-563-8823)



### CERTIFICATE OF COMPLIANCE

We hereby certify that the material listed below has been used to produce stainless steel tubing in accordance with specifications outlined in ASTM A554-03/EN 10204 3.1.

Type: 304/304L  
Size: 0.750"x 0.750"x 0.065"x 240.000"  
Finish: As Welded  
Your P.O. #: MX2035  
Item Code: 50-9781

HEAT NO.: 947757

COIL NO.: 8769204

#### CHEMICAL ANALYSIS (%):

C	Mn	P	S	Si	Cr	Mo	Ni
0.0220	1.7200	0.0320	0.0000	0.4300	18.2000	N/R	8.1000
Cu	Ti	Al	N	Co	Cb		
N/R	N/R	N/R	0.0700	N/R	N/R		

#### MECHANICAL PROPERTIES:

YIELD STRENGTH P.S.I.	TENSILE STRENGTH P.S.I.	ELONGATION %	HARDNESS
43300	88500	59.00	81 HRB

*Mercury has not been used as an alloying material nor is it present in our processing methods.*

Date: 04/30/2010

Rob Kaminski

Metallurgical Lab Technician

Q.C. Reviewed  
2805/06/10

190 Frobisher Drive, Waterloo, Ontario, N2V 2A2  
Phone: (519) 746-0088 Fax: (519) 746-3941 (Toll Free: 1-800-563-8823)

**TST Overland Express**Division of TST Solutions L.P.  
One division of TST Solutions L.P.  
LUNS No. 242148401 (OVLD)P.O. Box 3030, Station A, Mississauga, Ontario L5A 3S3  
C.S.T.# 144612488  
Overland Western International Inc.(OVEA)  
3091 Rockefeller Avenue, Cleveland, Ohio 44115-3611Carrier Code  
Code du Transp.  
**2153**

750-9872029 9

Manifest From - Manifest de		To - À	1092198	12499	9	3	10	
Consignee - Consignataire		Bill of Lading No. - N° Connaissance		Purchase Order No. - N° de Commande		M	D - J	Y - A
DART AEROSPACE LTD		MARMON KEYSTONE LTD		Origin		Dest.	C.D.	
1270 ABERDEEN STREET		290 CHEMIN DU TREMBLAY		MTL		MTL	9	
HAWKESBURY, ON K6A 1K7		BOUCHERVILLE, PQ J4B 5X9		Declared Value - Valeur déclarée		Type - Genre		
				STD		0 01		
Bill To - Facturer à								
Origin Carrier - Premier Transporteur		O/C Pro No. - N° Facture P/T		Beyond Carrier - Transporteur subs.		S.R.		Amount - Montant
Pieces - Coils	H.M.	Description			Weight - Poids	Rate - Taux	Charges - Frais	
1		CRT STC STAINLESS ROUND BAR			395		COLLECT	
		STEEL SEAMLESS TUBE						
1		PCS ENVELOPPE						
		TEL# 613-632-5200						
		FUEL SURCHARGE						
		Printed on 09/03/2010 @ 19:56					COLLECT	
		** COLLECT **						
2 Total Pieces		GST# 144612488		Total Weight	Total Charges			
Coils total				Poids total	Frais totaux		COLLECT	
E & OE		Print Last Name A TransForce Company		Connecting Carrier Please - Protect this Amount		Any loss or damage must be noted on pro bill at time of delivery, otherwise consignee's signature will constitute clear receipt.		
		SW INTACT		Au transporteur suivant - Frais à protéger		Toutes pertes ou dommages doivent être notés sur le connaissement au moment de la livraison, autrement la signature du consignataire constituera un reçu final.		
		<input type="checkbox"/> YES <input type="checkbox"/> NO				C.O.D. Cash or Certified Cheque Only - Driver Collect This Amount		
						Total		
						P.S.I. Chèque visé ou argent comptant seulement - à percevoir par le chauffeur		
X		Received in Apparent Good Order - Reçu sans Avaire Apparente		Date	Time In	Time Out	Unit - Unité	Driver - Chauffeur
								Signature Copy - Copie de Signature

OEO-0981 04/06